Scoring table:

Searched:

Database

Title: Perfect score:

Sequence:

OM nucleic

Run on:

```
VISH WGC Project URL: http://mgc.nci.nih.gov
Contact: MgC help desk
Emall: agapbs-refmail.nih.gov
Tissue Procurement: Jeffrey Green M.D.
Tissue Procurement: Jeffrey Green M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G. E. Consortium (LINL)
DNA Sequencing by: Baylor College of Medicine Human Genome
Center code: BCM-HGSC
Web site: http://www.hgsc.bcm.tmc.edu/cdna/
Contact: villalonebcm.tmc.edu.
Villalon, D.K., Luna, R.A., Hale, S.M., Hulyk, S., Lu, X., Garcia,
A.M., Holloway, M., Telford, B, Hodgson, A., Bouck, J., Yu, W.,
                                                                                                   601681141
601304953
601681425
602015261
602253418
                                                                                                                                                                        602812462
                                                                                                                                                                                                                                                                  L3-CT021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Musmalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
1 (bases 1 to 2633)
Strausberg,R.
Direct Submission
Submitted (27-APR-2001) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2550,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BC006836 2633 bp mRNA HTC 12-JUL-2001
Mus musculus, Similar to discoidin domain receptor family, member
BC006836 BC006836 1 GI:14711754
                                                               BG403848
BF338761
BF527983
BE898332
BE735635
BE899403 (
                                                                                                                                                       BE613181
BG541310
BG541310
BF344537
BG696424
BG86352
BF339561
BF9395635
BF529368
BF529368
BF529368
BF529368
                                                                                                                                   BF344637
BF792714
                                                                                                                                                                                                                                                                                                                                                                 BG820294 6
BG831101 6
BG116520 6
                                                                                                                                                                                                                                                                                                                    BE395129
BG289311
BE305175
AW629699
                                                                                                                                                                                                                                                                                                                                                                                                                      ALIGNMENTS
                                                BG752521
BG403848
                                                                                            BE898332
BE735635
BE899403
BF344637
                                                                                                                                                    BE613181
BG913935
                                                                                                                                                                                                                                                                                                               BE395129
                                                                                                                                                                                                                                                                                                                                                                                    BG116520
            662
957
683
685
1144
898
801
1018
759
921
1009
759
759
759
                                                                                                                                                                                                                   977
732
831
626
1037
680
649
1325
645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          house mouse.
                                                                                                                                                                                 15.9
15.8
15.8
15.8
15.7
15.7
15.7
15.2
15.2
14.9
14.9
14.9
        654.6
650.8
650.4
646.4
646.4
646.4
650.3
631.2
631.2
631.2
631.2
631.2
631.2
631.2
631.2
631.2
631.2
631.2
                                                                                                                                                                                                                                                  620.8
619.6
                                                                                                                                                                                                                                                                                   603.6
602.4
594.8
591.2
588.4
586.8
583.8
583
                                                                                                                                                                                                                                                                        613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
BC006836
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
        REMARK
COMMENT
                                                               December 8, 2001, 18:56:41; Search time 1735.73 Seconds (without alignments) 24528.455 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AL528664 AL528664
BI257820 60296918
BE912221 602806864
BE74806 601575025
BF345815 602017891
BI193181 602947157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BC006836 Mus muscu
                                                                                                                       AL528663 AL528663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Description
                                                                                                                                                                                                                          22703874
GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                         11351937 seqs, 5372889281 residues
                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:

    nucleic search, using sw model

                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                        IDENTITY_NUC (Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BG912321
BE744806
                                                                                                             US-08-153-397A-1
                                                                                                                                                                                                                                  Minimum DB seg length: 0
Maximum DB seg length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  em_gss_other:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               em_gss_pro:*
em_gss_rod:*
em_gss_vrt:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      em_gss_fun:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               em_gss_hum:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     em_gss_pln:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           em_gss_inv:
                                                                                                                                                                                                                                                                                                                                  em_estfun:*
                                                                                                                                                                                                                                                                                                                                               em_esthum:*
                                                                                                                                                                                                                                                                                                                                                        em_estin:*
em_estom:*
em_estpl:*
em_estbs:*
                                                                                                                                                                                                                                                                                                                                                                                                   em_estro:*
em_estov:*
em_htc:*
                                                                                                                                                                                                                                                                                                                                                                                                                                      gb_est1:*
gb_est2:*
gb_htc:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gb_gss:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         770
799
715
719
744
718
                                                                                                                                                                                                                                                                                                                      EST: *
```

Clone distribution: MGC clone distribution information can be found

AL043251 DKFZp434K BE304984 600942930

BG696171

BF345815 BI193181 BG696171 AL043251 BE304984

814.6 715.8 684 680.4 672.4 672.6 660.2

Score

Result ģ 815.2

```
2074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1568
                                                                                                                                                                                                                                                                                                                                                                                        1774
                                                                                                                                                                                                                                                                                                                                                                                                       1509
                                                                                                                                                                                                                                                                                                                                                                                                                                      1568
                                                                                                                                                                                                                                                                                                                                           1389
                                                                                                                                                                                                                                                                                                                             1654
                                                                                                                                                                                        1101
                                                                                                                                                                                                      1414
                                                                                                                                                                                                                     1161
                                                                                                                                                                        1354
                                                                                                                           981
                                                                                              921
                                                                 861
                                                                               1174
                                   801
      741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                         ŏ
                                                                                                                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                                                                                           ŏ
                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                              ŏ
                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                     ŏ
                                                                                                                                                                                                                                                   임
                                                                                                                                                                                        g
                                                                                                                                                                                                       δ
                                                                                                                                                         셤
                                                                                                                                                                         ò
                                                                                              g
                                                                                                               ò
                                                                                                                             g
                                                                                                                                           ò
                                                  ò
                                                                 g
                                                                                ò
                      ò
                                   g
                                                                                                                                                                     5
                                                                             ag model. Infiltrating
mouse."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         994 ATGGGGGTCTGGGCCAGCTGGCAGATGGTGTGGTGGGCTGGATGACTTTAGGAAGACTC 1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             933
                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                  813
                                                                                                                                                                                                                                                                                                                                                                       663
                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                    753
                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                       AGTACTIGCAGGIGGAICIACAACGACICCACGIGGCICIGGIGGGCACCCAGGGAC 633
through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Series: IRAK Plate: 16 Row: o Column: 14
This clone was selected for full length sequencing because it
passed the following selection criteria: Hexamer frequency ORF
analysis
                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                             513
                                                                                                                                                                                                   180
                                                                                                                                                                                                                  393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----GGGCTGCAGT
                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGAGGCCGTGTACCTCAACGACTCCACCTATGACGGACATACCGTGGGCGGACTGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                   GCCTCTGGAGGGATGGACTCCTGTTACACCGCCCCTGTGGGGGCAGACAATGTATTAAT
                                                                                                                                                                                                                                                                                                                                                                     GIGACAICTCTGCTTCCAGCTCCTGGTCAGAITCCACTGCCGCCGCCGCCACAGCAGGTTGG
                                                                                                                                                                                             TGTCATCTTTACTGCTGCTG----CTCTTGGTGGCAAGTGGAGATGCTGACATGAAGGGAC
                                                                                                                                                                                                                            AGAGATGCTGCCCCCACCCCTTAGGCCCGAGGGATCAGGAGGTATGGGACCACAGGCCC
                                                                                                                                                                       244;
                                                                                                                                                       Length 2633;
                                      Location/Qualifiers

1. 2633

2. 2633

3. Organism="Mus musculus"

Adb_Arte="taxon:10090"

(clone="imAGE:3598142"

(tissue_type="Mammary tumor. C3(1)-Tag model.

(clone="imAGE:3598142"

(clone_lib="NGT_GGAP_Man6"

/lone_lib="NGT_GGAP_Man6"

/lote="Vector: pCMV-SPORT6"

/note="Vector: pCMV-SPORT6"
                                                                                                                                                                        Indels
                                                                                                                                                        Score 1720; DB 12;
Pred. No. 9.8e-309;
0; Mismatches 310;
                                                                                                                    r: pCMV-SPORT6"
825 g 520 t
                                                                                                                                                             43.4%;
                                                                                                                               805 C
                                                                                                                                                                Query Match
Best Local Similarity 79.9
Matches 2200; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721 GCCTCTGGCG
                                               This clone
                                                                                                                                  ಥ
                                                                                                                                  483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     731
                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         814
                                                                                                                                                                                                                                                                                                                                                                                                              694
                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                  574
                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                634
                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                    514
                                                                                                                                  BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                      454
                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                            121
                                                                                                                                                                                                                           337
                                                                                                                                                                                                                                                         394
                                                                                                                                                                                               277
                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
```

용 8

윱 ð

셤 ö

셤 ö

g ò

g ö

셤 ă

셤 ð

õ

```
2073
                                                                                                                                                                                                                                                                                                                                                                                                                                               1637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2133
                                                                                                                                                                                                                                                                                                                                                                                                                                  2013
                                                                                                                                                                                                                                                                                                                                                                                                        1953
                                                                                                                                                                                                                                                                                                                                                                                                                     1577
                                                                                                                                                                                                                                                                                                                                                  1567
                                                                                                                                                                                                                                                                                            1773
                                                                                                                                                                                                            1653
                                                                                                                                                                     1160
                                                                                                                                                                                   1473
                                                                                                                             1353
                                                                                                                                           1100
                                                                                                                                                        1413
                                                                                                         1233
                                              1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTATGCTGTGCTGCACTGCCCCAGGGGAGGGGGATGGGCCCCCCAGAGTGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                  ------GCCTGCAGTG
                                                                                                                                                                                                                                                                                                                        GAGGCCCGGGCCCCCCCCACACCCGCCTGGGCCAAACCCCAACACCCAGGCCTACAGTG
                                                                                                                                                                                                                                                                  1834 CGTIGCIGCICICCAATCCAGCCIACCGCCICCIICIGGCCACIIACGCCCGICCCCTC
                                                                                                                                                               TCTCTGATGTGGTGAACAATTCCTCCGGCACTGGGAGGCACCTTCCCGGCCAGCCCCT
                                                                                                                                                                                           1041 GCCTTGGAGACCCCAGAGCCGGCCATCTCAGTGCCCTGGGTGGCCACGTGGCCGCT
                                                                                                                                                         TCTGCAGTGCCGCTTCCTCTTTGCGGGGCCCTGGTTACTCTTCAGCGAAATCTCCTTCA
                                                                                                                              1294 ACCIGGGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTTGGCGGCCGTGTGGCTCGCT
                                                                         TCCACTGTAACAACATGCACGCTGGGAGCCCGTCTGCCTGGCGGGGTGGAATGTCGCT
                                                                              1234 TCCGGCGTGGCCCTGCCATGGCCTGGGAGGGGGAGCCCATGCGCCACCTAGGGGGCCA
                                              1114 GIGGCTATGIGGAGATGGAGITIGAGTTIGACCGGCTGAGGGCCTTCCAGGCTATGCAGG
                                                      AGGAGCTGCGGGTCTGGCCAGGCTATGTGGGATGGAGCAACCACAGCTTCTCCA
```

m

```
2253
                                                                            1877
                                                                                             2313
                                                                                                                                  2373
                                                                                                                                                                      2433
                                                                                                                                                                                                           2493
                                                                                                                                                                                                                             2099
                                                                                                               1937
                                                                                                                                                                                        2039
                                                                                                                                                                                                                                                                                   2613
                                                                                                                                                                                                                                                                                                     2219
                                                                                                                                                                                                                                                                                                                                        2279
                                                                                                                                                                                                                                                                                                                        2673
                                                                                                                                                                                                                                                                                                                                                           2733
                                                                                                                                                                                                                                                                                                                                                                             2339
                                                                                                                                                                                                                                                                                                                                                                                               2793
                                                                                                                                                                                                                                                                                                                                                                                                                 2399
                                                                                                                                                                                                                                                                                                                                                                                                                                   2853
                                                                                                                                                                                                                                                                                                                                                                                                                                                      2459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2579
                           GTAAGGGACACCCTTTGCTGGTAGCTGTCAAGATCTTACGGCCAGATGCCAACAAGAATG
                                                                                                                             CCTATGCTGTGCCTGCACTGCCCCCAGGGGCGGTTGGGGATGGGCCCCCCAGAGTGGATT
                                                     ACCTGTGTGAGGTCGACAGCCCTCAAGATCTGGTCAGTCTTGATTTCCCCCTTAATGTGC
                                                                ACAAGGACACCCCTTGCTGGTAGCAGTGAAGATCCTCCGGCCAGATGCCACCAAAAATG
                                                                                                                                                                            TCCCTCGATCTCCACTCCGCTTCAAGGAGAAGCTTGGCGAGGGCCAGTTTGGGGAGGTGC
                                                                                                                                                                 TCAAGGACCCCAACATCATTCGGCTGCTGGGGCGTGTGTGCAGGACGACCCCCTCTGCA
                                                                                                                                                                                                      TGATTACTGACTACATGGAGAACGGCGACCTCAACCAGTTCCTCAGTGCCCACCAGCTGG
                                                                                                                                                                                                                AGGACAAGGCAGCCGAGGGGCCCCTGGGGACGGGCAGGCTGCGCAGGGGCCCCACCATCA
                                                                                                                                                                                                                                                     GCTACCCAATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCGGCATGCGGCTATCTGGCCA
                                                                                                                                                                                                                                                                                          2160 GCTACCCTATGCTGTTACACGTGGGGGCCCAGATCGCCTCTGGCATGCGTTATCTCGCCA
                                                                                                                                                                                                                                                                                                                              CCATCAAAATCGCAGACTTTGGCATGAGCCGGAACCTCTATGCTGGGGACTATTACCGTG
                                                                                                                                                                                                                                                                                                                                                                 TCTGTAGGGCCCAGCCCTTTGGGCAGCTCACCGACGAGCAGGTCATCGAGAACGCGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACTCAACTTTGTACATCGGGACCTGGCCACGCGGAACTGCCTAGTTGGGGGAAAATTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                AGTTCACGACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCCTGTGGGAGGTGCTGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                         2400 AGITCACAAACAGCCAGIGACGITIGGGCCTICGGAGTGACCCTGTGGGAGGTGCTGGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2974 GCCTATATGAGCTGATGCTTCGGTGCTGGAGCCGGGAGTCTGAGCAGCGACCAC 3027
                                                     2194
                                                                        1818
                                                                                          2254
                                                                                                                              2314
                                                                                                                                                                 2374
                                                                                                                                                                                     1980
                                                                                                                                                                                                       2434
                                                                                                                                                                                                                         2040
                                                                                                                                                                                                                                          2494
                                                                                                                                                                                                                                                              2100
1698
                                                                                                                                                1938
                                                                                                                                                                                                                                                                                2554
                                                                                                                                                                                                                                                                                                                    2614
                                                                                                                                                                                                                                                                                                                                      2220
                                                                                                                                                                                                                                                                                                                                                        2674
                                                                                                                                                                                                                                                                                                                                                                                                                                2794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2580
a
                 ò
                                 g
                                                                       g
                                                                                                        8
                                                    ò
                                                                                         à
                                                                                                                              ò
                                                                                                                                              셤
                                                                                                                                                                                   g
                                                                                                                                                                ò
                                                                                                                                                                                                       ò
                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

```
241
2740
                           2800
                                                                               2920
                                                                                                          2980
                                                                                                                       479
                                                                  361
ò
            ద
                          ò
                                      g
                                                    ö
                                                                  8
                                                                               ö
                                                                                            d
                                                                                                          ò
                                                                              EST 16-FEB-2001 sapiens cDNA clone CSODF033Y015
                                                                              MRNA
Homo
                                                                      N AL539517 LTI_FL013_FBrn1 HC prime, mRNA sequence.
AL539517.1 GI:170c^---
EST
                                                                                                                           Homo sapiens
```

human.

VERSION KEYWORDS SOURCE ORGANISM

DEFINITION

ACCESSION

RESULT AL539517 LOCUS

```
CDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-stranded cDNA was digested with Not I and cloned into the Not I and Eco RV sites of the PCMVSPORT 6 vector. Library was constructed by Life Technologies. Contact: Feng Liang Life Technologies. A division of Invitrogen 9800 Medical Center Drive Rockville Maryland 20850, USA. Fax: (1) 301 610 8371 Email:
                                                                                                                                                                                                                                           /clone_lib="LTI_FL013_FBrn1"
/dev_stage="pooled tissue from post conception fetuses (20 week, 24 week and 26 week)"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                /note-"Organ: Fetal brain; Vector: pCMVSPORT 6; 1st strand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ä
 Euteleostom1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2500 AGGCAGCCGAGGGGGCCCCTGGGGACGGGCAGGCTGCGCAGGGGCCCCACCATCAGCTACC 2559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTITIGIACATCGGGACCTGGCCACGCGGAACTGCCTAGTTGGGGAAAATTTCACCATCA 2679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: segreféquencsope.cns.fr, Web : www.genoscope.cns.fr.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCGGCATGCGCTATCTGGCCACACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCGGGCAGTGCTGCCCATCCGCTGGATGGCCTGGGAGTGCATCCTCATGGGGAAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAATCGCAGACTTTGGCATGAGCCGGAACCTCTATGCTGGGGGACTATTACCGTGTGCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCCTGTGGGAGGTGCTGATGCTCTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2860 GGGCCCAGCCCTTTGGGCAGCTCACCGACGAGGAGGTCATCGAGAACGCGGGGGGAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGAGCTGATGCTTCGGTGCTGGAGCCGGGAGTCTGAGCAGCGACCACCCTTTTCCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGCCCAGCCTTTGGGCAGCTCACCGAGGAGGAGCTCATCGAGAACGCGGGGGAGTTCT
               Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .,
m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1010;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                         1 (bases 1 to 1010)
L1,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-langth cDNA libraries and normalization
Contact: Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ч
                                                                                                                                                                                                                                                                                                                                                                                                                                    fliangelifetech.com URL :
http://fulllength.invitrogen.com"
121 c 298 g 199 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 960; DB 10;
Pred. No. 5.8e-168;
1; Mismatches 1;
Craniata;
                                                                                                                                                                                             /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="CSODF033Y015"
                 Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24.2%;
Eukaryota; Metazoa;
               Mammalia; Eutheria;
                                                                                                                                                                              1. .1010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Sim
Matches 983;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BASE COUNT
ORIGIN
                           REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2680
                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                             FEATURES
                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유
```

5

us-08-153-397a-1.rst

ORIGIN	Query Match 20.6%; Score 815.2; DB 10; Length 1019; Best Local Similarity 89.0%; Pred. No. 3.9e-141; Matches 906; Conservative 22; Mismatches 85; Indels 5; Gaps	OY 2893 AGGTCATCGAGAAACGCGGGGAGTTCTTCCGGGACCAGGCCGGCGGGTGTACCTGTCCC 2952   1   1   1   1   1   1   1   1   1	QY 2953 GGCGCCTGCCTGCCGGAGGCCTATATGAGCTGATGCTTCGGTGCTGGAGCCGGGAGT 3012	Qy 3013 CTGAGCAGCGACCACCTTTTCCCAGCTGGATCCTGGCAGAGGATGCACTCAACA 3072 :1	OY 3073 CGGTGTGAATCACACATCCAGCTGCCGCTCCCTCAGGGAGTGATCCAGGGAAGCCAGTG 3132	Oy 3133 ACACTAAAACAAGACACACAATGGCACCTCTGCCCTTCCCGTCCCGACAGCCCTTCACC 3192	0y 3193 TCTAATAGAGGCAGTGAGACTG-CAGGTGGGCTGGGCCCACCCAGGGAGCTGATGCCCCT 3251	0y 3252 TCTCCCCTTCCTGGACACACTCTCATGTCCCTTCCTGTTCCTTCC	OY 3312 GTGGCCACCAGCTGGTC-CTGTGGATGGGATCCTCTCCACCTCTAGCCATCCT 3370	OY 3371 TGGGGAAGGGTGGGGAAATATAGGATAGACACTGGACATGGCCCATTGGAGCACCTGG 3430	OY 3431 GCCCCACTGGACAACACTGATTCCTGGAGAGGTGGCTGCGCCCCAGCTTCTCTCTC	QY       3491       TGACACACTGGACCCCACTGGCTGAGAATCTGGGGTGAGGAGGAGGAGGAGGAA       3550         I       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		QY 3611 ACCTGAAACACTGGGGGTAGCCCCGCCCCAGCCCTCAGTCACCCTCCA 3670	OY 3671 CTTGCAGTCTTGTAGCTACAACTTCTCTAAGCCTATACGTTTCTGTGGAGTAAATATTGG 3730   11	OY 3731 GATTGGGGGGAAAGAGGACCAACGGCCCATAGGGTTGGACATCTCTAGTGTAG 3790   11   1   1   1   1   1   1   1   1	QY       3791       CTGCCACATTGATTTTCTATAATCACTTGGGGTTTGTACATTTTTGGGGGAGACAC       3850         IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	OY 3851 AGATTITTACACTAATATATGACCTAGCTTGAGGCAATTITAATCCCCTGCACTAGG 3908
QY 3040 TGCATCGGTACTGGCAGAGGATGCACTCAACACGGTGTGAATCACACATCCAGCTGCCC 3099	OY 3100 CTCCCTCAGGGAGTGATCCAGGGAAGCCAGTGACACTAAAACAAGAGGGCACAATGGCA 3159 					QY 3400 GACACTGGACATGGACCATTGGAGCACTGGGCCCCACTGGACAACACTGATTCCTGGAG 3459	QY 3460 AGGIGGCIGCCCCAGCITCICICC 3487    :	LT 3 8663/c	LOCUS AL528663 1019 bp mRNA EST 13.FEB-2001 DEFINITION AL528663 LTI_NFL001_NBC4 Homo sapiens cDNA clone CS0DD001xK21 3 ACCESSION AL528663	VERSION AL528663.1 GI:12792156 KEYWORDS EST. SOURCE human. ORGANISM Homo sapiens	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutherla; Primates; Catarrhini; Hominidae; Homo. REFERENCE 1 (bases 1 to 1019) AUTHORS LI,W.B., Gruber,C., Jessee,J. and Polaves,D.		BP 191 91006 EVRY codex - France Email: seqref@genoscope.cns.fr. Web : www.genoscope.cns.fr. FEATURES Location/Qualifiers source 11019	<pre>/organism="Homo sapiens" /db_xref="taxon:9606" /clone="CSODD001xk21" /clone_lib="frI_NF001_NBC4"</pre>	<pre>/sex="male" //tissue_type="neuroblastoma cells" /lab_host="DH10B" /note="Organ: brain; Vector: pcMVSPORT 6; 1st strand cDNA</pre>	was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-stranded cDNA was digested with Not I and cloned into the Not I and Eco RV sites of the pCMVSPORT 6 Vector. Library was normalized. Library was constructed	by Life Technologies. Contact : Feng Liang Life Technologies, a division of Invitrogen 9800 Medical Center Drive Rockville, Maryland 20850, USA Fax : (1) 301 610 8371 Email : fliangalifetech com unt.	BASE COUNT 299 a 272 c 242 g 179 t 27 others

```
human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                    817
                                                                                                                                757
                                                                           697
                                                                                                                                                                                                                                          877
                                                                                                                                                                                                                                                                     688
                                                                                                                                                                                                                                                                                                                                                       997
                                                                                                                                                                                                                                                                                                                                                                                807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
BI257820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                              셤
                                                                          ò
                                                                                               g
                                                                                                                                ò
                                                                                                                                                        g
                                                                                                                                                                                      ò
                                                                                                                                                                                                           g
                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                용
                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                         Note="Organ: brain; Vector: pCWVSPORT 6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-stranded cDNA was digested with Not I and cloned into the Not I and Eco RV sites of the pCMVSPORT 6 vector. Library was normalized. Library was constitucted by Life Technologies. Contact: Feng Liang Life Technologies, a division of Invitrogen 9800 Medical Center Price Rockville, Maryland 20850, USA Fax: (1) 301 610 brive Rockville, Maryland 20850, USA Fax: (1) 301 610 http://fullength.invitrogen.com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3
                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1. (Dases 1 to 987);
1. (M.B., Gruber, C., Jessee, J. and Polayes, D.
Full.length cDNA libraries and normalization
Unpublished (2001)
                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          576
                                                                    AL528664 987 bp mRNA EST 13-FEB-2001
AL528664 LTI_NFL001_NBC4 Homo sapiens cDNA clone CSODD001YK21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                       Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: segref@genoscope.cns.fr, Web : www.genoscope.cns.fr.
       C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGTGACGGGGATGGGGCCTGGTGCCCCGCAGGGTCGGTGTTTCCCAAGGAGGAGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTTGCAGGTGGATCTACAACGACTCCACCTGGTGGCTCTGGTGGGCACCCAGGGACGGC
59 IGATITITACACITATATITGGTCCTTGCTTGAGGAAATITITAAITATGAWITAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 814.6; DB 10; Length 987;
Pred. No. 5e-141;
4; Mismatches 3; Indels. 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6 others
                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="neuroblastoma cells"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                        /clone="CSODD001yK21"
/clone_lib="LTI_NFL001_NBC4"
/sex="male"
                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   332 g
                                                                                                                          AL528664.1 GI:12792157
                                                                                            prime, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 20.6%;
Best Local Similarity 98.7%;
Matches 848; Conservative
                                                                                                                                                                                                                                                                Contact: Genoscope
                                                                                                                                                                     Homo saplens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   186
                                                                                                                                                      human
                                         RESULT 4
AL528664
LOCUS
DEFINITION
                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  388
                                                                                                                                                                                                                                                                                                                      FEATURES
 g
```

셤

g ò

õ g õ g ò qq δ g

```
Exkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Deservational institutes of Health, Mammalian Gene Collection (MGC)

National institutes of Health, Mammalian Gene Collection (MGC)

National institutes of Health, Mammalian Gene Collection (MGC)

Ontact: Robert Strausberg, Ph.D.

Email: Gapbb.-r@mail.nih.gov

Tissue Procurement: ATCC

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: Incyte Genomics, Inc.

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM1265 row: c column: 05

High quality sequence stop: 765.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGGGTCTGGGCCAGCTGGCAGATGTGTGTGGTGGAGGCTGGATGACTTTAGGAAGAGTCAGG 1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BI257820 770 bp mRNA EST 17-JUL-201602969918F1 NIH_MGC_12 Homo sapiens CDNA clone IMAGE:5109436 5'
                                                                                                                                                                                                                                                                                                                       936
                                                                                                                                                                                                                                                                                                                                                                                                      966
                                                                                                                                                                                                                                                                                                                                                                                                                                             908
                                           507
                                                                                                                       567
                                                                                                                                                              816
                                                                                                                                                                                                      627
                                                                                                                                                                                                                                             876
                                                                                                                                                                                                                                                                                    687
                                                                                                                                                                                                                                                                                                                                                              746
                      TCTGGAGGGATGGACTCCTGTCTTACACCGCCCTGTGGGGCAGACAATGTATTTATCTG
                                                                                                                                                                                                                                                                                                                                            637 ATGCCGGGGCCTGGGCAAGGAGTTCTCCCGGAGCTACCGGCTGCGTTACTCCCGGGATG
                                                                              GTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCAGGAGGTGATCTCAGGCAATGAGG
                                                                                                                                                          ACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCCATGGTTGCCCGACTGGTTCGCT
                                                                                                                                                                             TCTACCCCGGGCTGACCGGGTCATGAGTGTCTGTCTGCGGGTAGAGCTCTATGGCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone_lib="NIH_MGC_12"
/tissue_type="cervical carcinoma cell line"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:5109436"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BI257820.1 GI:14813571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1117 GCTATGTGGAGATGGAGTT 1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA sequence.
BI257820
```

Euteleostomi;

```
Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

I (Dases 1 to 799)

NIH-MGC http://mgc.ncl.nih.gov/

NIH-MGC http://mgc.ncl.nih.gov/

NIH-MGC http://mgc.ncl.nih.gov/

Contact: Robert Strausberg, Ph.D.

Email: Capabs.remail.nih.gov

Tissue Procurement: David N. Louis, M.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://mage.llh.gov

Plate: LLAMIO875 row: Column: 16

High quality sequence stop: 768.

Location/Qualifiers

/clone="Inma"/ MagE: 4939239"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /lab_host="DH10B (T1 phage-resistant)"
/note="Organ: brain; Vector: pCMV-SPORT6; Site_1:
Site_2: Sal1; Cloned unidirectionally. Primer: Oli
Average insert size 2.3 kb. Constructed by Life
Technologies. Note: this is a NCI_CGAP Library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2443 ACTACATGGAGAACGGCGACCTCAACCAGTTCCTCAGTGCCCACCAGCTGGAGGACAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGCCGAGGGGGCCCCTGGGGACGGGCAGGCTGCGCAGGGGCCCACCATCAGCTACCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCCGAGGGGGCCCCTGGGGACGGGCAGGCTGCGCAGGGGCCCACCATCAGCTACCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCTGCTGCATGTGGCCAGCCCAGATCGCCTTCCGGCATGCGCTATCTGGCCACACTCAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGTACATCGGGACCTGGCCACGCGGAACTGCCTAGTTGGGGAAAATTTCACCATCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCGCAGACTTTGGCATGAGCCGGAACCTCTATGCTGGGGACTATTACCGTGTGCAGGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGCAGTGCTGCCCATCCGCTGGATGGCCTGGGAGTGCATCCTCATGGGGAAGTTCACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGCGAGTGACGTGTGGCCTTTGGTGTGACCCTGTGGGAGGTGCTGATGCTCTGTAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCAGCCCTTTGGGCAGCTCACCGAGCAGGTCATCGAGAACGCGGGGGAGTTCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 17.3%; Score 684; DB 11; Best Local Similarity 95.7%; Pred. No. 7.8e-117; Matches 758; Conservative 0; Mismatches 25;
                                                                                                                                                                                                                                                                                                                                                                              source
                      ORGANISM
                                                                                            AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2863
                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                       FEATURES
     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             φ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                      5
/note="Organ: cervix; Vector: pCMV-SPORT6; Site_1: Not1; Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dr. Average insert size 1.4 kb. Library prepared by Life Technologies."

1 207 c 262 g 157 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BG912321 799 bp mRNA EST 05-JUN-2001
602806864F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4939239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                        GAAGGTGGCTATTCACTGAGCGATGGGGTTGGACTTGAAGGAATGCCAAGAGATGCTGCC 288
                                                                                                                                                                                                                                                                                              CCCACCCCTTAGGCCCGAGGGATCAGGAGCTATGGGACCAGAGGCCCTGTCATCTTAC 348
                                                                                                                                                                                                                                                                                                                   61 CCCACCCCTTAGGCCCGAGGGATCAGGAGCTATGGGACCAGAGGCCCTTAGCTTTAC 120
                                                                                                                                                                                                                                                                                                                                                                    468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           719
                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                         AGTGCCGCTATGCCCTGGGCATGCAGGACCGGACCATCCCAGACAGTGACATCTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGGGCCTGGTGCCCCGCAGGGTCGGTGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGGCTGGAAGGACCGCTGGGGTCAGGAGGTGATCTCAGGCAATGAGGACCCTGAGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGTGCTGAAGGACCTTGGGCCCCCCCATGGTTGCCCGACTGGTTCGCTTCTACCCCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGACCGGGTCATG----AGTGTCTGTCTGCGGGTAGAGCTCTATGGCTGCCTCTGGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCTACAACGACTCCACCTGGTGGCTCTGGTGGGCACCCCAGGGACGGCATGCCGGGGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGGCAAGGAGTTCTCCCGGAGCTACCGGCTGCGTTACTCCCGGGATGGTCGCCGCTGGA
                                                                                                                                                                                      4,
                                                                                                                                              Score 715.8; DB 11; Length 770; Pred. No. 1e-122; 0; Mismatches 17; Indels 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            262 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GI:14292797
                                                                                                                                              Query Match
Best Local Similarity 97.3%;
Matches 750; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5/, mrNA sequence.
BG912321
BG912321.1 GI:14292
EST.
                                                                        BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                          409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ø
                                                                                                                                                                                                                      229
                                                                                                                                                                                                                                                          Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                              289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BG912321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1,11,4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                    å
                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

ŝ

Gaps

6

Length 799; Indels 2562

9

2682

180

2742

240

2802

300

2862

420

360

2922

480

\_1: NotI; Oligo dT.

```
2682 ATCGCAGACTTTGGCATGAGCCGGAACCTCTATGCTGGGGACTATTACCGTGTGCAGGGC 2741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                  2742
                                                                                                                  9
                                                                                                                                                  2802
                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BF345815
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                 a
                                                                                  ò
                                                                                                           g
                                                                                                                                           ŏ
                                                                                                                                                                              qq
                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                           οy
                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tissue procurement: DCTD/DTP

CDNA Library Preparation: Ling Hong/Rubin Laboratory

CDNA Library Preparation: Ling Hong/Rubin Laboratory

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov

Plate: LLCM319 row: a column: 07

High quality sequence stop: 713.

Location/Qualifiers

Location/Qualifiers

I. 715

ADEATE TAXON:9606"

(Clone—"IMAGE::3836046"

(Clone—"IMAGE::3836046"

(Clone—"IMAGE::3836046"

(Clone—"IMAGE::3836046"

(Clone—"IMAGE::3836046"

(Clone—"IMAGE::3836046"

(Clone—"IMAGE::3836040"

(Alab_Date—"Pull) B (phage-resistant)"

(Alab_Date—"Pull) B (phage-resistant)"

(Alab_Date—"Duff D Pinning. Directionally

Cloned into ECORI/Xhol sites using the following 5'
adaptor: GGCACGGG(G). Size-selected > 500bp for average
insert size 1.8kb. Library constructed by Ling Hong in

the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZaP-cDNA synthesis kit

(Stratagene) and Superscript II RT (Life Technologies)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 715)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Tissue Procurement: DCTD/DRP
                                              GAGCTGATGCTTCGGTGCTGGAGCCGGGAGTCTGAGCAGCGACCACCCTTTTCCCAGCTG 3041
                                                                                                                                                                                                                                      BE744806 715 bp mRNA EST 15-SEP-2000
601575025F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3836046 5'
BE744806
1097 CCCCTCCCTCAGGGAGTGATCCAGGGGAAGCC-AGTGACACTAAAA-CAAGAGGACACAA
                                                                                                                                                                                           CATCGGTTCCTGGCAGAGGATGCACTCAACACGGTGTGAATCACACATCCAGCTG-----
                                                                                                                            BE744806.1 GI:10158798
                                                                                                                                                                                                                                                                                                     3215 CAGGTGGGCTGG 3226
                                                                                                                                                                                                                                                                                                                                     780 CAGGTGGTGGG 791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                           3042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                   RESULT
BE744806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                         g
                                                                                                          à
                                                                                                                                         g
                                                                                                                                                                                                       g
                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                      g
```

÷

÷

Indels

DB 10;

Score 680.4; DB 10 Pred. No. 3.6e-116; 0; Mismatches 1;

17.2%; 99.4%;

Conservative

Best Local Similarity Matches 714; Conserv

```
BE345815 719 bp mRNA EST 22-NOV-2000 60017891F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4153367 BF345815
                                                                                                                                                                                                      3101
                                       2801
                                                                                                                                                    2921
                                                                                                                                                                                                                                                                   3041
                                                                                                                                                                                                                                                                                                                                                                                 3161
                                                                                             ACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCCTGTGGGAGGTGCTGATGCTCTGTAGG 2861
                                                                                                                                                                                                                                                                                                                                                                                                                                        3221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTTCCTGTTCTTCCTTCCTAGAAGCCCCTGTCGCCCAACCTGGTCCTGTGGATGGG 3341
                                                                                                                                                                                                                                                                                              359
                                                                                                                                                                                                                                                                                                                                                                                                           478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120 ACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCCTGTGGGAGGTGCTGATGCTCTTAGG 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                    3342 ATCCTCTCCACCCTCCTCTAGCCATCCCTTGGGGAAGGGTGGGGAAAATATAGGATA 3399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGGGCAGTGCTGCCCATCCGCTGGATGCCCTGGGAGTGCATCCTCATGGGGAAGTTCACG
                                                    180 GCCCAGCCCTTGGGCAGCTCACCGACGAGCAGGTCATCGAGAACGCGGGGGAGTTTCTTC
                                                                                                                                                                                                                                                                                                                                       1 ATCGCAGACTTTGGCATGAGCCGGAACCTCTATGCTGGGGGACTATTACCGTGTGCA-GGC
                                                                                                                                                   GCCCAGCCCTTTGGGCAGCTCACCGACGAGGTCATCGAGAACGCGGGGGAGTTCTTC
                                                                                                                                                                                                                                                               1982 GAGCTGATGCTTCGGTGCTGGAGCCGGGAGTCTGAGCAGCGACCACCTTTTCCCAGCTG
                                                                                                                                                                                                                                                                                                                        3042 CATCGGTTCCTGGCAGAGGATGCACTCAACACGGTGTGAATCACACATCCAGCTGCCCCT
                                                                                                                                                                                                                                                                                                                                                                              3102 CCCTCAGGGAGTGATCCAGGGGAAGCCAGTGACACTAAAACAAGAGGACACAATGGCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTGCCCTTCCCCTCCCGACAGCCCATCACCTCTAATAGAGGCAGTGAGACTGCAGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BF345815.1 GI:11293410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
```

```
3116 TC 3117
                           Ę.
                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                            source
                                                                                         DEFINITION
                           718
                                                                                                                                                                                              AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BASE COUNT
                                                                                                              ACCESSION
                                                          RESULT
BI193181
                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   182
                                                                                                                                                                                                                                                                                                                                                 FEATURES
      ð
                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                   4
                                                                                                                                          Noti;
                                                            /organism="Homo saplens"
/db_xref="taxon:9606"
/clone="IMAGE:4153367"
/clone_lib="Noi_CGAP_Brn67"
/tlssue_type="anaplastic oligodendroglioma with 1p/19q
                                                                                                                                                                                                                                                                2457 GGCGACCTCAACCAGTTCCTCAGTGCCCACCAGGTGGAGGACAAGGCAGCCGAGGGGCC 2516
                                                                                                                                                                                                                                                                                                                                                    CCTGGGGACGGGCAGGCTGCGCAGGGGCCCACCATCAGCTACCCAATGCTGCTGCATGTG 2576
                                                                                                                                                                                                                                                                                                                                                                                                  2636
                                                                                                                                                                                                                                                                                                                                                                                                                                           2696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2937 CAGGIGIACCIGICCGGCCGCCTGCCTGCCGCAGGGCCTAIAIGAGCIGAIGCTICGG 2996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                          /lab_host="DH10B (T1 phage-resistant)"
/note="Organ: brain; Vector: pCMV-SPORT6; Site_1: Not Site_2: Sall; Cloned unidirectionally. Primer: Oligo Average insert size 2.3 kb. Constructed by Life Technologies! Note: this is a NCI_CGAP Library."
                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       658
                                                                                                                                                                                                                                                                                                                      ATGAGCCGGAACCTCTATGCTGGGACTATTACCGTGTGCAGGGCCGGGCATGCTGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 ATGAGCCGGAACCTCTATGCTGGGACTATTACCGTGTGCAGGGCCGGGCAGTGCTGCCC
                                                                                                                                                                                                                                                                                                                                                                                            2577 GCAGCCCAGATCGCCTCCGGCATGCGCTATCTGGCCACTCCAACTTTGTACATCGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGCCACGCGGAACTGCCTAGTTGGGGAAAATTTCACCATCAAAATCGCAGACTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2997 TGCTGGAGCCGGGAGTCTGAGCAGCGACCATCTTTCCCAGCTGCATCGGTTCCTGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGGATGCACTCAACA-CGGTGTGAATCACACATCCAGCTGCCCCTCCCTCAGGGAGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4;
                                                                                                                                                                                                                         17.0%; Score 672.4; DB 11; Length 719; 99.3%; Pred. No. 1.1e-114; Live 0; Mismatches 1; Indels 4;
found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLAM9421 row: f column: 24
High quality sequence stop: 719.
Location/Qualifiers
                                                                                                                                                                                                                                  Best_Local Similarity 99.3
Matches 717; Conservative
                                                                                                                  loss"
                                                                                                                                                                                                                         Query Match
                                                     source
                                                                                                                                                                              BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                 2397
                                                                                                                                                                                                                                                                                                                                                    2517
                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3057
                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                              ద
                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
```

```
the
4 >500bp
3 by Ling
4 of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /Organism="Homo sapiens"
/db_xref="taxon:9666"
/dlone=lib="lmAGE:5090223"
/clone=lib="lmAGE:5090223"
/tlssue_type="epithelioid carcinoma cell line"
/tlssue_type="epithelioid carcinoma cell line"
/tls.bache="bridge" (phage-resistant)"
/note="Organ: pancreas; Vector: pOTB7; Site_1: XhoI; Site_2: EcoRI, CDNA made by oligo-dT priming.
Directionally cloned into EcoRI/XhoI sites using the following 5' adaptor: GGGACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of Galifornia, Berkeley) using ZAP-CDNA synthesis kit (Stratagaene) and Superscript II RT (Life Technologies).
Note: this is a NHLMGC Library, |" (Life Technologies).
                                                                                                                                                                                                                       E 1 (bases 1 to 744)

S NIH-MGC http://mgc.ncl.nlh.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
L Onpublished (1999)

Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nlh.gov
Tissue Procurement: ATCC
CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM1852 row: b column: 16
High quality sequence stop: 675.
                                                                                                                                                                                              Euteleostomi;
       Sapiens cDNA clone IMAGE:5090223 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2297 AGATGCCACCAAGAATGCCAGCTTCTCCTTGTTCTCCAGGAATGATTTCCTGAAAGAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3,
                                                                                                                                                                                            Vertebrata; E
.; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                               Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Ve
Mammalia; Eutheria; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 672; DB 11;
Pred. No. 1.3e-114;
0; Mismatches 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
BI193181 744 bp mRNA
602947157F1 NIH_MGC_42 HOMO
                                                                                        BI193181.1 GI:14648201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 97.5%;
Matches 714; Conservative C
                                              mRNA sequence.
BI193181
                                                                                                                                           human.
```

Sat

4

```
g
                                                                                                                                                                                       ò
                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Enkaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleista; Eutheria; Primates; Catarrhini; Hominidae; Homo.

(Dassa 1 to 718)

National Institutes of Health, Mammalian Gene Collection (MGC)

(Introduct: Robert Strausberg, Ph.D.

Email: cqapbs-remail.nih.gov

Tissue Procurement: James Cleaver, M.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA

Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC. Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

High quality sequence stop: 717.

Location Qualifiers

Location Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Craniata; Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note-"organ: skin; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dr
                                                                                                                                                            2716
                                                                                                                                                                                                                                                           GTGCATCCTCATGGGGAAGTTCACGACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCCT 2836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST 07-MAY-2001 sapiens cDNA clone IMAGE:4802421
                                                                                                                                                                                                                                                                                                                                                                CAGTGCCCACCAGCTGGAGGACAAGGCAGGGGGGCCCCTGGGGACGGGCAGGCTGC
                                                 GCAGGGCCCACCATCAGCTACCCAATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCGG
                                                                                                                                                                                                        TGGGGACTATTACCGTGTGCAGGGCCGGGCAGTGCTGCCCATCCGCTGGATGGCCTGGGA
                                                                                                      CATGCGCTATCTGGCCACACTCAACTTTGTACATCGGGACCTGGCCACGCGGAACTGCCT
                                                                                                                                                         AGTTGGGGAAAATTTCACCATCAAAATCGCAGACTTTGGCATGAGCCGGAACCTCTATGC
                                                                                                                                                                                                                                                                                                                GTGGGAGGTGCTGATGCTCTGTAGGGCCCAGCCCTTTGGGCAGCTCACCGACGAGGT
                                                                                                                                                                                                                                                                                                                            /clone="IMAGE:4802421"
/clone_lib="NCI_CGAP_Skn3"
/lab_host="DH10B (T1 phage-resistant)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BG696171 718 bp mRNA
602659285F1 NCI_CGAP_Skn3 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      mRNA sequence.
BG696171
BG696171.1 GI:13961044
                                                                                                                                                                                                                                                                                                                                                                                                                      CGCCTGCCTGCC 2967
                                                                                                                                                                                                                                                                                                                                                                                                                                  720 CGCCTGCTGCCC 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG696171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 10
BG696171
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                   12537
                                                                                                                              362
                                                                                                                                                                                422
                                                                                                                                                                                                                                                                                      541
                         242
                                                                           302
                                                                                                     2597
                                                                                                                                                        2657
                                                                                                                                                                                                          2717
                                                                                                                                                                                                                                   482
                                                                                                                                                                                                                                                             2777
                                                                                                                                                                                                                                                                                                                                                                2897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
 õ
                      g
                                                 ò
                                                                        QQ
                                                                                                     ö
                                                                                                                          g
                                                                                                                                                     ò
                                                                                                                                                                               a
                                                                                                                                                                                                          ò
                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                        원
```

```
by Life
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom1;
Mammalia; Eutheria; Primates; Catarrhin1; Hominidae; Homo.
1 (Dases 1 to 772)
Blum, H., Bauersachs, S., Mewes, H.W., Gassenhuber, J. and Wiemann, S.
                                                                                                                                                                                          2789
                                                                                                                                                                                                                                            2849
                                                                                                                                                                                                                                                                                                                                                    2969
                                                                                                                                                                                                                                                                                                                                                                                                                                                           3089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2850 ATGCTCTGTAGGGCCCAGCCCTTTGGGCAGCTCACCGACGAGCAGGTCATCGAGAACGCG 2909
                                                                                                                                                                                                                                                                                                                                                                                                    CAGGGCCTATATGAGCTGATGCTTCGGTGCTGGAGCCGGGAGTCTGAGCAGCGACCACCC 3029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .210 GACTGCAGGTGGGCCCACCAGGAGCTGATGCCCTTCT--CCCTTCTGGAC 3267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACACTCTCATGTCCCCTT-CCTGTTCTTCCTAGAAGCCCCTGTCGCCCACCCAGCT 3326
                                                                                                                                                                                                                                                                                                                                                              629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clone
                                                                                                                                2670 TTCACCATCAAAATCGCAGACTTTGGCATGAGCCGGAACCTCTATGCTGGGGACTATTAC
                                                                                                                                               2730 CGTGTGCAGGGCCGGGCAGTGCTGCCATCCGCTGGATGGCCTGGGAGTGCATCCTCATG
                                                                                                                                                                                                                                          GGGAAGTICACGACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCCTGTGGGAGGTGCTG
                                                                                                                                                                                                                                                                                                                                                GGGGAGTICTICCGGGACCAGGGCCGGCAGGTGIACCIGICCCGGCCGCCTGCCTGCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTTCCCAGCTGCATCGGTTCCTGGCAGAGGATGCACTCAACACGGTGTGAATCACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Average insert size 1.5kb. Library constructed Technologies. Note: this is a NCI_CGAP Library." 228 c 210 g 147 t
                                                                                                             5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AL043251 772 bp mRNA EST 29-FEB DKF2p434K0223_r1 434 (synonym: htes3) Homo sapiens CDNA DKF2p434K0223 5', mRNA sequence. AL043251 GI:5422649
                                                                                   Length 718;
                                                                                                            Indels
                                                                                  Score 662.6; DB 11;
Pred. No. 7.2e-113;
0; Mismatches 4;
                                                                              16.7%;
llarity 98.7%;
Conservative
                                                                                              Similarity
                               ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human.
                                                                                                        Matches 710;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EST
                                                                                Query Match
                                                                                              Local
                           BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
ALO43251
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                2910
                                                                                                                                                                                                                                                                                                                                                                                                    2970
                                                                                                                                                                                                                61
                                                                                                                                                                                                                                          2790
                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                       3030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
```

604 783 664

```
/urganism="Homo sapiens"
/db_xref="taxon:9606"
/clone=Inbe"InAlp. 30605"
/clone_Libe"NHH_MGC_15"
/clone_Libe"NHH_MGC_15"
/tlssue_type="adenocarcinoma cell line"
/tlss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E l'amazini, rimaces, destinini, nominimae; nomo.

S NIH-MGC http://mgc.nci.nlh.gov/.
National.Institutes of Health, Mammalian Gene Collection (MGC)
L Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: gapbs rémail.inh.gov
Tissue Procurement: ATC
CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: NIH Intramural Sequencing Center
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov
Plate: LLCM51 row: k column: 08
High quality sequence start: 9
High quality sequence start: 9
High quality sequence stop: 702.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BE304984 912 bp mRNA EST 13-JUL-2000 600942930T2 NIH_MGC_15 Homo saplens cDNA clone IMAGE:2959615 3'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3156 GGCACCTCTGCCCTTCCCCTCCCGACAGCCCATCACCTCTAATAGAGGCAGTGAGACTGC 3215
                                                                                                                                                                                                                                                                                                   784 TTGGGCCCCCGATGGTTGCCCGACTGGTTCGCTTCTACCCCCGGGCTGACCGGGTCATGA 843 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 | 11111 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3098 CCCICCCTCAGGGAGTGATCCAGGGGAAGCCAGTGACAC--TAAAACAAGAGGACACAAT 3155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              664 CCCGGAGCTACCGGCTGCGTTACTCCCGGGATGGTCGCTGGATGGGCTGGAAGGACC
                                                                                                                                                         GCTGGGGTCAGGAGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Craniata; Vertebrata; Eutele
Catarrhin1; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16.5%; Score 655.6; DB 10; Length 912; 95.4%; Pred. No. 1.4e-111; 1ve 0; Mismatches 29; Indels 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGTCTGTCTGCGGGTAGAGCTCTATGGCTGC 875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BE304984.1 GI:9176727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 95.4
Matches 740; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA sequence.
BE304984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BE304984/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE COUNT
                                                                                                                                                                                                                              605
                                                                                                                                                         724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
                                                                            요
                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                               Aur Klopferspitz 18a D-82152 Martinsried, Germany
Aur Klopferspitz 18a D-82152 Martinsried, Germany
This is the 5' sequence of the clone insert
Clone from S. Wiemann, Molecular Genome Analysis, German Cancer
Research Center (DKF2); Email s.wiemann@dkfz-heidelberg.de;
sequenced by LMU (Ludwig Maximillans University,
Munich/Germany) within the CDNA sequencing consortium of the German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Berlin.
6, 14059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGTCGGACGCCTGGGTCTGCCGGGAAGAGCGATGAGAGGTGTCTGAAGGTGGCTATTCA 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGAGGGATCAGGACTATGGGACCAGAGGCCTGTCATCTTACTGCTGCTGCTCTTTG 363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCTCGGGAGCCGCCTCCCGACACCCGAGCCCCGCCGCGCCTCCCGGCTCCCGG 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="Vector: pSportl; Site_1: NotI; Site_2: SalI"
250 c 260 g 143 t 1 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     244 CTGAGCGATGGGGTTGGACTTGAAGGAATGCCAAGAGATGCTGCCCCCACCCCTTAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCGAGGGATCAGGAGCTATGGGACCAGAGGCCCTGTCATCTTTACTGCTGCTGCTCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGCAAGTGGAGATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      484 ATTCCACTGCCGCCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGGCCTGGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGCAGGGTCGGTGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCTGGTGGCTCTGGTGGGCACCCCAGGGACGGCATGCCGGGGGGCCTGGGCAAGGAGTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            58;
                                                                                                                                                                                                                                                                                                                                                         Genome Project.

No 31 sequence available.
This clone (DKFZp434K0223) is available at the RZPD in Please contact the RZPD: Ressourcenzentrum, Heubnerweg Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 772;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 660.2; DB 10; Length
Pred. No. 2e-112;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/db_xreef="texon:9606"
/clone="DKEZp434K0223"
/clone_llb="434 (synonym: htes3)"
/dev_stage="adult"
/lab_host="DHIDB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 92.4%;
Matches 750; Conservative
EST (Blum, et al.)
Unpublished (1999)
                                                                        Contact: Blum H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
```

ò 셤 셤 ö g ð g ö g ò g à 名 ò 셤 à 셤 ò

à

Euteleostomi;

;

Gaps

Sat

```
BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                         õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 662)

10 alsa Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R., Nagai, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Costa, F.F., Goldman, G.H., Carvalho, A.F., Matsikuma, A., Bala, G.S., Simpson, D.H., Brunstein, A., deoliveira, F.S., Bucher, P., Jongeneel, C.V., O'Hare, M.J., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EST 22-JAN-2001 sapiens cDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     expressed
                                                                                                                                                                       3452
                                                                                3333
                                                                                                                                                                                                                   3511
                                                                                                                                                                                                                                                                3571
                                                                                                                                                                                                                                                                                                            3631
                                                                                                                                                                                                                                                                                                                                                    3751
                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                             AACGGCCCATAGCCTTGGGGTTGGACATCTCTAGTGTAGCTGCCACATTGATTTTTCTAT 3811
                                                                                                                                                                                             420
                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                           CCTGGAGAGGTGGCTGG-CCCCAGCTTCTCTCTCTCTGTCACACACTGGACCCCACTGG
                                                                                                                                                                 AGGATAGACACTGGACATGGC-QCATTGGAGCACCTGGGCCCCACTGGACAACACTGATT
CGGCACTCGGCCCGTCCGGACAGCCCATCACCTCTAATAGAGTCAGGAGACCGC
                                             AATCACTTGGGGTTTGTACATTTTGGGGGGGAGAGACACAGATTTTTACACTAATA 3867
                                 AGGTGGGCTGGGCCCACCAGGGAGCTGATGCCCCTTCTCCCTTCCTGGACACACTCTC
                                                                                                                          TGGATGGGATCCTCTCCACCCTCCTAGCCATCCCTTGGGGAAGGGTGGGGAAAATAT
                                                                                                                                                                                                                                                                                                        CTGTACTTGTCCTCAGCTTGGGCTTCTTCCTCCTCCATCACCTGAAACACTGGACCTGGG
                                                                                                                                    CTGAGAATCTGGGGGTGAGGAGGACAAGAAGGAGGAAAATGTTTCCTTGTGCCTGCTC
                                                                                                                                                                                                                                                                                  CTGAGAATCTGGGGGTGAGGAGAAGAAGAAGAAGAAAATGTTTCCTTGTGCCTGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGATAGACACTGGACATGGCGCCATTGGAGCACCTGGGCCCCCACTGGACACACTGATT
                                                                                                                                                                                                                                                                                                                                                                                                 CTICICIAAAGCCIATACGITICIGIGGAGTAAATATIGGGATIGGGGGGAAAGAGGGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shotgun sequencing of the human transcriptome with ORF sequence tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3491-3496 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (2),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BF944646 662 bp mRNA
MONNINI71-181000-001-c05 NN1171
BF944646 GI:12361921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Proc. Natl. Acad. Sci.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Simpson A.J.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Simpson, A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BF944646
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                 3216
                                                                              3276
                                                                                                    599
                                                                                                                         3334
                                                                                                                                                                    3394
                                                                                                                                                                                                                                                                                                        3572
                                                                                                                                                                                                                                                                                                                                                     3632
                                                                                                                                                                                                                                                                                                                                                                                                3692
                                                                                                                                                                                                                                                                                                                                                                                                                      179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                              539
                                                                                                                                                                                          479
                                                                                                                                                                                                                 3453
                                                                                                                                                                                                                                       419
                                                                                                                                                                                                                                                             3512
                                                                                                                                                                                                                                                                                  359
                                                                                                                                                                                                                                                                                                                               299
                                                                                                                                                                                                                                                                                                                                                                           239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
MEDLINE
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                             3752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
           음
                                 ò
                                                     g
                                                                                                                                            원
                                                                              à
                                                                                                  g
                                                                                                                          à
                                                                                                                                                                    ö
                                                                                                                                                                                         셤
                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                           Dp
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                    ç
                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
/note="Organ: nervous_normal; Vector: puc18; Site_1: Smal; Site_2: Smal; A mini.library was made by cloning products derived from Orbszrs PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low string conditions. 1 others
                                                                                           This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=PMO&t2=PMO-NN1171-181000-001-055&13=2000-10-18&14=1)
Seq primer: puc 18 forward
High quality sequence stop: 660.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
   Paulo-SP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGGATCCTCTCCACCCTCCTCTAGCCATCCCTTGGGGAAGGGTGGGGAAAATATAGGA 3397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGACACTGGACATGGCCCATTGGAGCACCTGGGCCCCACTGGACACACTGATTCCTGG 3457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGGATCCTCTCCACCTCTTAGCCATCCCTTGGGAAGGGTGGGGAAAATATAGGA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CACGACTGCGGAGTGACGTGTGGGCCTTTGGTGTGACCCTGTGGGAGGTGCTGATGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2858 TAGGGCCCAGCCCTTTGGGCAGCTCACCGACGAGCAGGTCATCGAGAACGCGGGGGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2918 CTTCCGGGACCAGGGCCGCCAGGTGTACCTGTCCCGGCCGCCTGCCCGCAGGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2978 ATATGAGCTGATGCTTCGGTGCTGGAGCCGGGAGTCTGAGCAGCGACCACCCTTTTCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTGCATCGGTTCCTGGCAGATGCACTCAACACGGTGTGAATCACACATCCAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 GCTGCATCGGTTCCTGGCAGAGGATGCACTCAACACGGGTGTGAATCACACATCCAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3098 CCCTCCCTCAGGGAGTGATCCAGGGGAAGCCAGTGACACTAAAACAAGAGGACACAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGGGCTGGGCCCACCCAGGGAGCTGATGCCCCTTCTCCCCTTCTGGACACACTCTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421 GTGGGCTGGGCCCACCCAGGGAGCTGATGCCCCTTCTCCCCTTTCTGGACACACTCTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 662;
Prof. Antonio Prudente 109, 4 andar, 01509-010,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 654.6; DB 11
Pred. No. 2.2e-111;
0; Mismatches 5;
                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="NN1171"
/dev_stage="Adult"
                                 Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16.5%;
99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   657; Conservative
                                                                                                                                                                                                                                    1. .662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3398
```

```
BE737252.1 GI:10151244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2918 CTTCCGGGACCAGGGCCGG 2936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA sequence.
BE737252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                       2321
                                                                             2381
                                                                                                                                     2441
                                                                                                                                                                                           2501
                                                                                                                                                                                                                       403
                                                                                                                                                                                                                                                                               463
                                                                                                                                                                                                                                                                                                         2621
                                                                                                                                                                                                                                                                                                                                     523
                                                                                                                                                                                                                                                                                                                                                                 2681
                                                   234
                                                                                                         283
                                                                                                                                                                 343
                                                                                                                                                                                                                                                   2561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 15
BE737252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                 g
                                                                                                      g
                                                                             à
                                                                                                                                     ó
                                                                                                                                                              g
                                                                                                                                                                                       ò
                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /issue_type="adenocarcinoma cell line"
/lab_host="DH10B (phage-resistant)"
/note="Organ: colon; Vector: pOTB7; Site_1: XhoI; Site_2:
ECORI; cDNA made by oilgo-dr priming. Directionally
cloned into ECORIXANOI sites using the following 5,
adaptor: GGCACGAG(G). Size-selected >500bp for average
insert size 1.8kb. Library constructed by Ling Hong in
the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZAP-CDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies)"
57 a 248 c 282 g 180 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 877)
NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                               CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Preparation: Ling Hong/Rubin Laboratory CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: image.llnl.gov Plate: LLCM51 row: k column: 08 High quality sequence stop: 725.
GAGGICGACAGCCCICAAGAICIGGICAGIC-IIGAIIICCCCCTIAAIGIGGGAAGGG 2260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2082 GIGCCIGCACIGCCCCCAGGGGCAGICGGGAIGGGCCCCCCAGAGIGGAITICCCICGA 2141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2142 TCTCGACTCCGCTTCAAGGAGAAGCTTGGCGAGGGCCAGTTTGGGGAGGTGCACCTGTGT 2201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2261 ACACCCTTTGCTGGTAGCTGTCAAGATCTTACGGCCAGATGCCAACAAGAATGCCAGCTT 2320
                                                                                                                                               600942930F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2959615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 653.8; DB 10; Length 877;
Pred. No. 3e-111;
0; Mismatches 47; Indels 30;
                                                                                                                                                                                                                                                                                                                                         Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .877 /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:9606"
/clone="IMAGE:2959615"
/clone_l1b="NIH_MGC_15"
                                                                                                                                           mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                               BE249888.1 GI:9119991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16.5%;
ilarity 91.0%;
Conservative (
                                                                                                                                            877 bp
                                                                                                                                                                                                                                                                                                                          Unpublished (1999)
                                                                                                                                                                       mRNA sequence.
BE249888
                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                167
                                                                                                                                                                                                                             human.
                                         3458 AG 3459
                                                                    662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Simi
Matches 782;
                                                          = g
                                                                                                                                        LOCUS
DEFINITION
                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BASE COUNT
ORIGIN
                                                                    661
                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                          JOURNAL
COMMENT
                                                                                                            RESULT 1/
BE249888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
             셤
                                         ð
                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   윱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           요
```

```
Exaryota: Metacoa: Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota: Metacoa: Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia: Eutheria: Primates; Catarrhini: Hominidae: Homo.

I (Dases 1 to 957)

NIH-MCC http://mgc.nci.nih.gov/.

NIH-MCC http://mgc.nci.nih.gov/.

NIH-MCC http://mgc.nci.nih.gov/.

Onpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: capabs-remail.nih.gov

Tissue Procurement: ATC

CDNA Library Preparation: Ling Hong/Rubin Laboratory

CDNA Library Preparation: Ling Hong/Rubin Laboratory

CDNA Library Preparation: Ling Genomics, Inc.

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MCC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:

http://image.llnl.gov

Plate: LLCM344 row: c column: 01

High quality sequence start: 22
CCCCAACATCATTCGGCTGCTGGGCGTGTGTGCAGGACGACCCCCTCTGCATGATTAC 2440
                                                                                                                                                                                2560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2798 CACGACIGCGAGIGACGIGIGGGCCIIIGGIGIGACCCIGIGGGAGGIGCIGAIGCICIG 2857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2858 TAGGGCCCAGCCCTTTGGGCAGCTCACCGAGGAGGTCATCGAGAACGCGGGGAGTT 2917
                                                                                                                                                                                                                                                                                                                                462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BE737252 957 bp mRNA EST 15-SEP-2000 601305802F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3640248 :
                                                                                                              AATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCGGCATGCGCTATCTGGCCACACTCAA
                                                                                                                                                                                                                                                                                                                                                                                           GGCAGCCGAGGGGCCCCTGGGGACGGCAGGCTGCGCAGGGGCCCCACCATCAGCTACCC
                                                                                                                                                                                                                                                                                                  AATCGCAGACTTTGGCATGAGCCGGAACCTCTATGCTGGGGACTATTACCGTGTGCA--G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTTGTACATCGGGACCTGGCCACGCGGAACTGCCCTAGTTGGGGAAAATTTCACCATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2739 GGCCGGGCAGTGCTGCCCATCCGCTGGATGGCCTGGGAGTGCATCCTCATGGGG-AAGTT
```

```
/tissuc_type="adenocarcinoma"
/lab_host="PH10B (phage-resistant)"
/note="lorgan: pancreas, vector: portBr; Site_1: XhoI;
Site_2: EcoRi; cDNA made by oligo-dT priming.
Directionally cloned into EcoRI/XhoI sites using the
following 5' adaptor: GGGAGGAGGO, Library constructed
by Ling Hong in the laboratory of Gerald M. Rubin
(University of California, Berkeley) using 2AP-cDNA
synthesis kit (Stratagene) and Superscript II RT (Life
Technologies): 18 g 201 t
                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                 1023 GTGGTGGGGCTGGATGACTTTAGGAAGAGTCAGGAGCTGCGGGTCTGGCCAGGCTATGAC 1082
                                                                                                                                                                                                                                                                                                                                                                                      1083 TATGTGGGATGGAGCAACCACAGCTTCTCCAGTGGCTATGTGGAGATGGAGTTTGAGTTT 1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1143 GACCGGCTGAGGCCTTCCAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTGGGA 1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGGAGCCCATGCGCCACAACCTAGGGGCAACCTGGGGGACCCCAGAGCCCGGGGTGTC 1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCTGGTTACTCTTCAGCGAAATCTCCTTCATCTCTGATGTGGTGAACAATTCCTCTCCG 1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1443 GCACTGGGAGGCACCTTCCCGCCAGCCCCCTGGTGGCCGCCTGGCCCACCACCACCAC 1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TICAGCAGCITGGAGCTGGAGCCCAGAGGCCAGCAGCCC-GTGGCCCAAGGCCGA-GGGGA 1560
                                                                                                                                                                                                                                                                                                                                                                                                                     127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTGCCCTCATGCTCTGGCGGCTGCACTGGCGCAGGCTCCTCAGCAAGGCTGAACGGAGG 1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              67
                                                                                                                                                                                                                                                                                                                                                GCCCGTCTGCCTGGCGGGGTGGAATGTCGCTTCCGGCGTGGCCCTGCCATGGCCTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCCGACCGCCATCCTCATCGGCTGCCTG - GTGGCCATCATCCTGCTCCTGCTGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGTTGGAAGAGGAGCTGACGGTTCACCTCTCG - TCCCTGGGGACACTATCCTCATCAA
                                                                                                                                                                                                                                                                                                             8;
                                                                                                                                                                                                                                                                                  Length 957
                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                Score 652; DB 10;
Pred. No. 6.5e-111
0; Mismatches 45
                                      /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:3640248"
/clone_lib="NIH_MGC_39"
ity sequence stop: (
Location/Qualifiers
                                     /organism-"Homo
                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 93.5%;
Matches 757; Conservative
High quality
                                                                                                                                                                                                                          137
                                                                                                                                                                                                                        BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1263
                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                308
                                                                                                                                                                                                                                                                                                                                                                                       å
                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
        QY
        1739
        CAACCGCCAGGTCCTAGAGAGCCACCCGTACCAGGAGCCCGGCCTCGTGGGAATCC
        1798

        Db
        727
        AGACCGGCCAGGTCTTAAAGGAGCCACCCGTAC--AGGGCCCGGCCTGGTGGATACC
        784

        QY
        1799
        GCCCCATTCGCTCTGTGCCCCAATGG
        1828

        P
        1111
        1111
        1111
        1111

        Db
        785
        GGCCCA-TCCGGTCCTGTGTCCGCATTTG
        813
```

Search completed: December 8, 2001, 20:10;20 Job time: 4419 sec